

REMARKS

Reconsideration of the instant application is respectfully requested. The present amendment is responsive to the Office Action of August 8, 2007, in which claims 1-7 and 9-20 are presently pending. Of those, claims 1-5, 10 and 11 remain rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,225,011 to Gotoh, et al., in view of U.S. Patent 6,347,291 to Berman. Claims 6, 9, 12-16 and 18-20 remain rejected under U.S.C. §103(a) as being unpatentable over Gotoh, in view of Berman, and further in view of U.S. Patent 6,801,825 to Utsonomyia.

In addition, claim 7 is now rejected under U.S.C. §103(a) as being unpatentable over Gotoh, in view of Berman, and further in view of U.S. Patent 4,327,292 to Wang, et al. Finally, claim 17 is now rejected under U.S.C. §103(a) as being unpatentable over Gotoh, in view of Berman and Utsonomyia, and further in view of Wang. For the following reasons, it is respectfully submitted that the application is now in condition for allowance.

On October 10, 2007, a telephone interview was conducted between the Examiner and the undersigned to discuss §103 rejections. Applicants now address those rejections as set forth below.

With respect to the §103 rejection of claim 1, the Examiner has indicated that (1) the previously claimed elements of “gathering alignment data” and “determining substrate position relative to the exposure system from alignment data of at least the first and second scanned areas” does not exclude alignment data gathered from scanning two alignment marks that are in the scanned area of the distortion marks; (2) the claim limitations disposing, locating, scanning a first area, defining a periodicity, locating a second point of interest, and scanning a second area proximate the second point of interest does not preclude an alignment routine for the exposure beam to the wafer; and

(3) the claim limitations gathering alignment data from at least scanning the first and second areas does not preclude gathering alignment data from either scanning area comprising both distortion and alignment marks for either substrate alignment or exposure beam alignment.

Accordingly, independent claim 1 has been amended as set forth above to more particularly point out that the claimed operations of gathering alignment data with respect to the patterned substrate specifically refer to the earlier claimed operations of “scanning a first area on the patterned substrate proximate the first point of interest for a first unique feature” and “scanning a second area on the patterned substrate proximate the second point of interest for a second unique feature corresponding to the first unique feature, wherein the first unique feature is saved as an alignment image for use in locating the second unique feature in the second area.” Moreover, claim 1 has further been amended to more particularly point out that the claimed operation of “determining substrate position relative to the exposure system” is from the claimed gathered alignment data, as now more clearly defined. Support for the present amendment is found at least in paragraphs [0028]-[0033] of the specification and in Figures 4-8 of the drawings.

Thus amended, the claims now define over Gotoh, which teaches locating points of interest and gathering alignment data from two different alignment routines (i.e., marks to detect optical mask distortion and alignment marks to detect substrate alignment).


Therefore, because neither Gotoh nor any of the other references of record teach each and every element of the pending claims, as now amended, the claims are not rendered obvious by the same, and it is respectfully submitted that the claims are now patentable over the references of record. Applicants also note that claims 12-20 have been cancelled. However, in so doing, the Applicants do not concede that the subject matter of any of the cancelled claims are not patentable over the art cited by the Examiner, as the present amendments and cancellations are only for facilitating expeditious prosecution of potential allowable subject matter in the parent application.

Applicants respectfully reserve the right to pursue the subject matter of the same in one or more continuation applications.

For the above stated reasons, it is respectfully submitted that the present application is now in condition for allowance. No new matter has been entered and no additional fees are believed to be required. However, if any fees are due with respect to this Amendment, please charge them to Deposit Account No. 09-0458 maintained by Applicant's attorneys.

Respectfully submitted,
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